

Sequence Listing Project.ST25  
SEQUENCE LISTING

<110> Centro de Ingenieria Genetica y Biotecnologia

<120> ARTIFICIAL PROMOTOR FOR THE EXPRESSION OF DNA SEQUENCES IN PLANT CELLS

<130> 976-26 PCT/US

<140> 10/539,476

<141> 2005-05-20

<150> PCT/CU2003/00018

<151> 2003-12-19

<150> CU 2002/0337

<151> 2002-12-27

<160> 34

<170> PatentIn version 3.3

<210> 1

<211> 86

<212> DNA

<213> artificial sequence

<220>

<223> synthetic construct

<400> 1

gaaacaaatt gaacatcatt ctatcaatac aacacaaaca caacacaact caatcattta 60

tttgacaaca caactaaaca accatg 86

<210> 2

<211> 198

<212> DNA

<213> artificial sequence

<220>

<223> synthetic construct

<400> 2

gaattctata tataggaagt tcatttcatt tggagcccc caaccctacc accaccacca 60

ccaccacctc ctccttcaca caacacacac acaacagatc tcccccatcc tccctcccg 120

cgcgcgcgc aacacctggt aagatggctg tgcgctcaga tatatatagt gatatgcact 180

acaaagatca taactagt 198

<210> 3

<211> 231

<212> DNA

<213> artificial sequence

<220>

<223> synthetic construct

<400> 3

ctagaccgcc gcctcccccc cccccctct ctaccttctc tctttctttc tccgtttttt 60

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ttttccgtct cgtctcgatc tttggccttg gtagtttggg ggcgagaggc ggcttcgctc 120
cccagatcgg tgcgcgtttt tttatttggg ggggcgggat ctgcgcgctg ggtctcggcg 180
tgcggccgga ttctcgcggg gaatggggct ctcggatgtg gatccgagct c 231

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<210> 4
<211> 255
<212> DNA
<213> artificial sequence

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<220>
<223> synthetic construct

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<400> 4
gatctgatcc gccgttggtg ggggagatat ggggcgttta aaatttcgcc atgctaaaca 60
agatcaggaa gaggggaaaa gggcactatg gtttaatttt tatatatattc tgctgctgct 120
cgtcaggatt agatgtgctt gatctttctt tcttcttttt gtgggtagaa tttgaatccc 180
tcagcattgt tcatcggtag tttttctttt gtcgatgctc accctgttgt ttggtgtttt 240
tatactagtg agctc 255

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<210> 5
<211> 93
<212> DNA
<213> artificial sequence

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<220>
<223> synthetic construct

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<400> 5
ctagtggcta tcctgacacg gtctctttgt caaatatctc tgtgtgcagg tataactgca 60
ggaaacaaca acaataacca tgggtctagag ctc 93

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<210> 6
<211> 692
<212> DNA
<213> artificial sequence

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<220>
<223> synthetic construct

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<400> 6
accaccacca ccaccaccac ctctccttc acacaacaca cacacaacag atctccccc 60
tcctccctcc cgtcgcgccg cgcaacacct ggtaagatgg ctgtgcgctc agatatatat 120
agtgatatgc actacaaaga tcataactag accgccgcct ccccccccc ccctctctac 180
cttctctctt tctttctccg tttttttttt cgtctcgtc tcgatctttg gccttggtag 240
tttgggggag agaggcggtc tcgtcgccca gatcgggtgc cgttttttta tttggagggg 300
cgggatctcg cggtctgggtc tcggcgtgcg gccggattct cgcggggaat ggggctctcg 360
gatgtggatc tgatccgccg ttgttggggg agatatgggg cgtttaaaat ttcgccatgc 420

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# Sequence Listing Project.ST25

|   |     |
|---|-----|
| taaacaagat caggaagagg ggaaaagggc actatggttt aatttttata tttttctgct | 480 |
| gctgctcgtc aggattagat gtgcttgatc tttctttctt ctttttgtgg gtagaatttg | 540 |
| aatccctcag cattgttcat cggtagtttt tcttttgtcg atgctcaccg tgttgtttgg | 600 |
| tgtttttata ctagtggcta tcctgacacg gtctctttgt caaatatctc tgtgtgcagg | 660 |
| tataactgca ggaaacaaca acaataacca tg                               | 692 |

<210> 7  
 <211> 750  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|  |     |
|--|-----|
| <400> 7  |     |
| gaattctata tataggaagt tcatttcatt tggagcccc caaccctacc accaccacca   | 60  |
| ccaccacctc ctcttcaca caacacacac acaacagatc tcccccatcc tccctcccgt   | 120 |
| cgcgccgcgc aacacctggg aagatggctg tgcgctcaga tatatatagt gatatgcact  | 180 |
| acaaagatca taactagacc gccgcctccc ccccccccc tctctacctt ctctctttct   | 240 |
| ttctccgttt tttttttccg tctcgtctcg atctttggcc ttggtagttt gggggcgaga  | 300 |
| ggcggcttcg tcgcccagat cgggtgcgctg ttttttattt ggaggggagg gatctcgcgg | 360 |
| ctgggtctcg gcgtgcggcc ggattctcgc ggggaatggg gctctcggat gtggatctga  | 420 |
| tccgccgttg ttgggggaga tatggggcgt ttaaaatttc gccatgctaa acaagatcag  | 480 |
| gaagagggga aaagggcact atggtttaat ttttatatat ttctgctgct gctcgtcagg  | 540 |
| attagatgtg ctgcatcttt ctttcttctt tttgtgggta gaatttgaat ccctcagcat  | 600 |
| tgttcatcgg tagtttttct tttgtcgatg ctccacctgt tgtttggtgt ttttatacta  | 660 |
| gtggctatcc tgacacgggc tctttgtcaa atatctctgt gtgcaggat aactgcagga   | 720 |
| aaacaacaaca ataaccatgg tctagagctc                                  | 750 |

<210> 8  
 <211> 757  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|   |     |
|---|-----|
| <400> 8   |     |
| accaccacca ccaccaccac ctctccttc acacaacaca cacacaacag atctccccc   | 60  |
| tcctccctcc cgtcgcgccg cgcaacacct ggtaagatgg ctgtgcgctc agatatatat | 120 |
| agtgatatgc actacaaaga tcataactag accgccgctt ccccccccc ccctctctac  | 180 |
| cttctctctt tctttctccg tttttttttt ccgtctcgtc tcgatctttg gccttggtag | 240 |

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|            |               |            |             |            |            |     |
|------------|---------------|------------|-------------|------------|------------|-----|
| tttggggg   | cg agaggcggct | tcgtcgccca | gatcgggtgcg | cgttttttta | tttggagggg | 300 |
| cgggatctcg | cggctgggtc    | tcggcgtgcg | gccggattct  | cgcggggaat | ggggctctcg | 360 |
| gatgtggatc | tgatccgccg    | ttgttggggg | agatatgggg  | cgtttaaaat | ttcgccatgc | 420 |
| taaacaagat | caggaagagg    | ggaaaagggc | actatggttt  | aatttttata | tatttctgct | 480 |
| gctgctcgtc | aggattagat    | gtgcttgatc | tttctttctt  | ctttttgtgg | gtagaatttg | 540 |
| aatccctcag | cattgttcat    | cggtagtttt | tcttttgctg  | atgctcacc  | tggtgtttgg | 600 |
| tgtttttata | ctagtggcta    | tcctgacacg | gtctctttgt  | caaatatctc | tgtgtgcagg | 660 |
| tataactgca | ggaaacaaat    | tgaacatcat | tctatcaata  | caacacaaac | acaacacaac | 720 |
| tcaatcattt | atttgacaac    | acaactaaac | aaccatg     |            |            | 757 |

<210> 9  
 <211> 815  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|            |            |             |            |             |            |     |
|------------|------------|-------------|------------|-------------|------------|-----|
| <400> 9    |            |             |            |             |            |     |
| gaattctata | tataggaagt | tcatttcatt  | tggagcccc  | caaccctacc  | accaccacca | 60  |
| ccaccacctc | ctccttcaca | caacacacac  | acaacagatc | tcccccatcc  | tccctcccgt | 120 |
| cgcgccgcgc | aacacctggt | aagatggctg  | tgcgctcaga | tatatatagt  | gatatgcact | 180 |
| acaaagatca | taactagacc | gccgcctccc  | ccccccccc  | tctctacctt  | ctctctttct | 240 |
| ttctccgttt | tttttttccg | tctcgtctcg  | atctttggcc | ttggtagttt  | gggggcgaga | 300 |
| ggcggcttcg | tcgccagat  | cggtgcgcg   | ttttttat   | ggaggggcgg  | gatctcgcg  | 360 |
| ctgggtctcg | gcgtgcggcc | ggattctcgc  | ggggaatggg | gctctcggat  | gtggatctga | 420 |
| tccgccgttg | ttgggggaga | tatggggcgt  | ttaaaatttc | gccatgctaa  | acaagatcag | 480 |
| gaagagggga | aaagggcact | atggtttaat  | ttttatatat | ttctgctgct  | gctcgtcagg | 540 |
| attagatgtg | cttgatcttt | ctttcttctt  | tttgtgggta | gaatttgaat  | ccctcagcat | 600 |
| tgttcatcgg | tagtttttct | tttgtcgatg  | ctcaccctgt | tgtttggtgt  | ttttatacta | 660 |
| gtggctatcc | tgacacggtc | tctttgtcaa  | atatctctgt | gtgcagggtat | aactgcagga | 720 |
| aacaaattga | acatcattct | atcaatacaa  | cacaaacaca | acacaactca  | atcatttatt | 780 |
| tgacaacaca | actaaacaac | catgggtctag | agctc      |             |            | 815 |

<210> 10  
 <211> 184  
 <212> DNA  
 <213> artificial sequence

<220>

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&lt;223&gt; synthetic construct

&lt;400&gt; 10

|   |     |
|---|-----|
| atcacctgta gttgtccgca ccaccgcacg tctcgcagcc aaaaaaaaaa aaagaaagaa | 60  |
| aaaaaagaaa aagaaaaaac agcaggtggg tccgggtcgt gggggccgga aaagcgagga | 120 |
| ggatcgcgag cagcgacgag gccggccctc cctccgcttc caaagaaacg ccccccatca | 180 |
| attc  | 184 |

&lt;210&gt; 11

&lt;211&gt; 94

&lt;212&gt; DNA

&lt;213&gt; artificial sequence

&lt;220&gt;

&lt;223&gt; synthetic construct

&lt;400&gt; 11

|   |    |
|---|----|
| aagcttgata tccatagcaa gcccagccca acccaaccca acccaaccca ccccagtgca | 60 |
| gccaaactggc aaatagtctc cacaccccgg cact                            | 94 |

&lt;210&gt; 12

&lt;211&gt; 1087

&lt;212&gt; DNA

&lt;213&gt; artificial sequence

&lt;220&gt;

&lt;223&gt; synthetic construct

&lt;400&gt; 12

|  |     |
|--|-----|
| aagcttgata tccatagcaa gcccagccca acccaaccca acccaaccca ccccagtgca  | 60  |
| gccaaactggc aaatagtctc cacaccccgg cactatcacc gtgagttgtc cgcaccaccg | 120 |
| cacgtctcgc agccaaaaaa aaaaaaagaa agaaaaaaa gaaaaagaaa aaacagcagg   | 180 |
| tgggtccggg tcgtgggggc cggaaaagcg aggaggatcg cgagcagcga cgaggccggc  | 240 |
| cctccctccg cttccaaaga aacgcccccc atcaattcta tatataggaa gttcatttca  | 300 |
| tttggagccc cccaacccta ccaccaccac caccaccacc tcctccttca cacaacacac  | 360 |
| acacaacaga tctcccccat cctccctccc gtcgcgccgc gcaacacctg gtaagatggc  | 420 |
| tgtgcgctca gatatatata gtgatatgca ctacaaagat cataactaga ccgccgcctc  | 480 |
| ccccccccc cctctctacc ttctctcttt ctttctccgt tttttttt cgtctcgtct     | 540 |
| cgatcttttg ccttggtagt ttgggggcga gaggcggctt cgtcgcccag atcggtgccg  | 600 |
| gtttttttat ttggaggggc gggatctcgc ggctgggtct cggcgtgcgg ccggattctc  | 660 |
| gcggggaatg gggctctcgc atgtggatct gatccgccgt tgttggggga gatatggggc  | 720 |
| gtttaaaatt tcgcatgct aaacaagatc aggaagaggg gaaaagggca ctatggttta   | 780 |
| atttttatat atttctgctg ctgctcgtca ggattagatg tgcttgatct ttctttcttc  | 840 |
| tttttggtgg tagaatttga atccctcagc attgttcacg ggtagttttt cttttgtcga  | 900 |

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|   |      |
|---|------|
| tgtcacccct gttgttttgt gtttttatac tagtggctat cctgacacgg tctctttgtc | 960  |
| aaatatctct gtgtgcaggt ataactgcag gaaacaaatt gaacatcatt ctatcaatac | 1020 |
| aacacaaaca caacacaact caatcattta ttgacaaca caactaaaca accatgggtct | 1080 |
| agagctc   | 1087 |

<210> 13  
 <211> 31  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|                                    |    |
|------------------------------------|----|
| <400> 13                           |    |
| gtcgactgac gcttcgaatg acgcacatgc c | 31 |

<210> 14  
 <211> 1065  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|  |      |
|--|------|
| <400> 14   |      |
| ggtaccgggc cccccctcga ctgacgcttc gaatgacgca catgccatca ccgtgagttg  | 60   |
| tccgcaccac cgcacgtctc gcagccaaaa aaaaaaaaaag aaagaaaaaa aagaaaaaga | 120  |
| aaaaacagca ggtgggtccg ggtcgtgggg gccggaaaaag cgaggaggat cgctgacgct | 180  |
| tcgaatgacg cacatgcccc agcagcgacg aggccggccc tccctccgct tccaaagaaa  | 240  |
| cgccccccat caattctata tataggaagt tcatttcatt tggagcccc caaccctacc   | 300  |
| accaccacca ccaccacctc ctcccttcaca caacacacac acaacagatc tcccccatcc | 360  |
| tccctcccgt cgcgccgcgc aacacctggg aagatggctg tgcgctcaga tatatatagt  | 420  |
| gatatgcact acaaagatca taactagacc gccgcctccc ccccccccc tctctacctt   | 480  |
| ctctctttct ttctccgttt tttttttccg tctcgtctcg atctttggcc ttggtagttt  | 540  |
| gggggcgaga ggcggcttcg tcgcccagat cggtgcgctg ttttttattt ggaggggagg  | 600  |
| gatctcgcgg ctgggtctcg gcgtgcggcc ggattctcgc ggggaatggg gctctcggat  | 660  |
| gtggatctga tccgccgttg ttgggggaga tatggggcgt ttaaaatttc gccatgctaa  | 720  |
| acaagatcag gaagagggga aaagggcact atgggttaaat ttttatatat ttctgctgct | 780  |
| gctcgtcagg attagatgtg cttgatcttt ctttcttctt tttgtgggta gaatttgaat  | 840  |
| ccctcagcat tgttcatcgg tagtttttct tttgtcgatg ctcaccctgt tgtttggtgt  | 900  |
| ttttatacta gtggctatcc tgacacggtc tctttgtcaa atatctctgt gtgcaggtat  | 960  |
| aactgcagga aacaaattga acatcattct atcaatacaa cacaaacaca acacaactca  | 1020 |

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atcattttatt tgacaacaca actaaacaac catggtctag agctc 1065

<210> 15  
<211> 1135  
<212> DNA  
<213> artificial sequence

<220>  
<223> synthetic construct

<400> 15  
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caacccaacc caccaccagtg cagccaactg gcaaatagtc tccacacccc ggcactatca 120  
ccgtgagttg tccgcaccac cgcacgtctc gcagccaaaa aaaaaaaaaag aaagaaaaaa 180  
aagaaaaaga aaaaacagca ggtgggtccg ggtcgtgggg gccggaaaag cgaggaggat 240  
cgctgacgct tcgaatgacg cacatgcccc agcagcgacg aggccggccc tccctccgct 300  
tccaaagaaa cgccccccat caattctata tataggaaagt tcatttcatt tggagcccc 360  
caaccctacc accaccacca ccaccacctc ctcttcaca caacacacac acaacagatc 420  
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ggaggggagg gatctcgcgg ctgggtctcg gcgtgcggcc ggattctcgc ggggaatggg 720  
gctctcggat gtggatctga tccgccgttg ttgggggaga tatggggcgt ttaaaatttc 780  
gccatgctaa acaagatcag gaagagggga aaagggcact atggtttaat ttttatatat 840  
ttctgctgct gctcgtcagg attagatgtg cttgatcttt ctttcttctt tttgtgggta 900  
gaatttgaat cctcagcat tgttcacggt tagtttttct tttgtcgatg ctcaccctgt 960  
tgtttggtgt ttttatacta gtggctatcc tgacacggtc tctttgtcaa atatctctgt 1020  
gtgcaggtat aactgcagga aacaaattga acatcattct atcaatacaa cacaaacaca 1080  
acacaactca atcattttatt tgacaacaca actaaacaac catggtctag agctc 1135

<210> 16  
<211> 31  
<212> DNA  
<213> artificial sequence

<220>  
<223> synthetic construct

<400> 16  
gaaggtaccg ccatggtcta aaggacaatt g

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<210> 17  
 <211> 27  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

<400> 17  
 ctccctcgagg gcgtttaaca ggctggc

27

<210> 18  
 <211> 186  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

<400> 18  
 ggtaccgagc attgcatgtc taagttataa aaaattacca catatTTTTT ttgtcacact 60  
 tgTTTgaagt gcagTTTatc tatCTTTata catatatTTa aactTTactc tacgaataat 120  
 ataatctata gtacaacaat aatatcagtg tTTtagagaa tcatataaat gaacagttag 180  
 acatgg 186

<210> 19  
 <211> 563  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

<400> 19  
 ggtaccgagc attgcatgtc taagttataa aaaattacca catatTTTTT ttgtcacact 60  
 tgTTTgaagt gcagTTTatc tatCTTTata catatatTTa aactTTactc tacgaataat 120  
 ataatctata gtacaacaat aatatcagtg tTTtagagaa tcatataaat gaacagttag 180  
 acatggtcta aaggacaatt gagtatTTtg acaacaggac tctacagttt tatCTTTta 240  
 gtgtgcatgt gttctcTTTt tTTTTTgcaa atagctTcac ctatataata cttcatccat 300  
 tttattagta catccattta gggTTtaggg ttaatggTTt ttatagacta atTTTTTTtag 360  
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 ccagcctgTT aaacgccctc gac 563

<210> 20  
 <211> 1692  
 <212> DNA  
 <213> artificial sequence



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**<220>**

<223> synthetic construct

<400> 20

|             |            |             |            |            |             |      |
|-------------|------------|-------------|------------|------------|-------------|------|
| gggtaccgagc | attgcatgtc | taagttataa  | aaaattacca | catatTTTTT | ttgtcacact  | 60   |
| tgtttgaagt  | gcagtttatc | tatctttata  | catatatTTT | aactttactc | tacgaataat  | 120  |
| ataatctata  | gtacaacaat | aatatcagtg  | ttttagagaa | tcatataaat | gaacagttag  | 180  |
| acatggtcta  | aaggacaatt | gagtattttg  | acaacaggac | tctacagttt | tatctTTTT   | 240  |
| gtgtgcatgt  | gttctccttt | TTTTTgcaa   | atagcttcac | ctatataata | cttcatccat  | 300  |
| tttattagta  | catccattta | gggtttaggg  | ttaatggttt | ttatagacta | atTTTTttag  | 360  |
| tacatctatt  | ttattctatt | ttagcctcta  | aattaagaaa | actaaaactc | tatttttagtt | 420  |
| TTTTtattta  | ataatttaga | tataaaatag  | aataaaataa | agtgactaaa | aattaaacaa  | 480  |
| atacccttta  | agaaattaaa | aaaactaagg  | aaacatTTTT | cttgtttcga | gtagataatg  | 540  |
| ccagcctggt  | aaacgccctc | gactgacgct  | tcgaatgacg | cacatgccat | ccatagcaag  | 600  |
| cccagcccaa  | cccaacccaa | cccaaccac   | cccagtgcag | ccaactggca | aatagtctcc  | 660  |
| acaccccggc  | actatcaccg | tgagttgtcc  | gcaccaccgc | acgtctcgca | gccaaaaaaa  | 720  |
| aaaaaagaaa  | gaaaaaaaaa | aaaaagaaaa  | aacagcaggt | gggtccgggt | cgtggggggcc | 780  |
| ggaaaagcga  | ggaggatcgc | tgacgcttcg  | aatgacgcac | atgcccgagc | agcgacgagg  | 840  |
| ccggccctcc  | ctccgcttcc | aaagaaacgc  | cccccatcaa | ttctatatat | aggaagttca  | 900  |
| tttcatttgg  | agccccccaa | ccctaccacc  | accaccacca | ccacctcttc | cttcacacaa  | 960  |
| cacacacaca  | acagatctcc | cccatcctcc  | ctcccgtcgc | gccgcgcaac | acctggtaag  | 1020 |
| atggctgtgc  | gctcagatat | atatagtgat  | atgcactaca | aagatcataa | ctagaccgcc  | 1080 |
| gcctcccccc  | ccccccctct | ctaccttctc  | tctttctttc | tccgtttttt | ttttccgtct  | 1140 |
| cgtctcgatc  | tttggccttg | gtagtttggg  | ggcgagaggc | ggcttcgtcg | cccagatcgg  | 1200 |
| tgcgcgtttt  | tttatttgga | ggggcgggat  | ctcgcggctg | ggtctcggcg | tgcggccgga  | 1260 |
| ttctcgcggg  | gaatggggct | ctcggatgtg  | gatctgatcc | gccgttgttg | ggggagatat  | 1320 |
| ggggcgttta  | aaatttcgcc | atgctaaaca  | agatcaggaa | gaggggaaaa | gggcactatg  | 1380 |
| gtttaatttt  | tatatatttc | tgctgctgct  | cgtcaggatt | agatgtgctt | gatctttctt  | 1440 |
| tcttcttttt  | gtgggtagaa | tttgaatccc  | tcagcattgt | tcatcggtag | tttttctttt  | 1500 |
| gtcgatgctc  | accctgttgt | ttggtgtttt  | tatactagtg | gctatcctga | cacggtctct  | 1560 |
| ttgtcaaata  | tctctgtgtg | cagggtataac | tgcaggaaac | aaattgaaca | tcattctatc  | 1620 |
| aatacaacac  | aaacacaaca | caactcaatc  | atttatttga | caacacaact | aaacaaccat  | 1680 |
| ggctctagagc | tc         |             |            |            |             | 1692 |

# Sequence Listing Project.ST25

<210> 21  
 <211> 223  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

<400> 21  
 ctcgagatac atattaagag tatggacaga catttcttta acaaactcca tttgtattac 60  
 tccaaaagca ccagaagttt gtcattggctg agtcatgaaa tgtatagttc aatcttgcaa 120  
 agttgccttt ccttttgtac tgtgttttaa cactacaagc catatattgt ctgtacgtgc 180  
 aacaaactat atcaccatgt atcccaagat gcttttttaa ttc 223

<210> 22  
 <211> 1032  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

<400> 22  
 ctcgagatac atattaagag tatggacaga catttcttta acaaactcca tttgtattac 60  
 tccaaaagca ccagaagttt gtcattggctg agtcatgaaa tgtatagttc aatcttgcaa 120  
 agttgccttt ccttttgtac tgtgttttaa cactacaagc catatattgt ctgtacgtgc 180  
 aacaaactat atcaccatgt atcccaagat gcttttttaa ttctatatat aggaagttca 240  
 tttcatttgg agccccccaa ccctaccacc accaccacca ccacctctc cttcacacaa 300  
 cacacacaca acagatctcc cccatcctcc ctcccgtcgc gccgcgcaac acctggtaag 360  
 atggctgtgc gtcagatat atatagtgat atgcactaca aagatcataa ctagaccgcc 420  
 gcctcccccc cccccctct ctaccttctc tctttctttc tccgtttttt ttttccgtct 480  
 cgtctcgatc tttggccttg gtagtttggg ggcgagaggc ggcttcgctg cccagatcgg 540  
 tgcgcgtttt tttatttgga ggggcgggat ctgcgcgctg ggtctcggcg tgcggccgga 600  
 ttctcgcggg gaatggggct ctcggaatgt gatctgatcc gccgttggtg ggggagatat 660  
 ggggcgttta aaatttcgcc atgctaaaca agatcaggaa gaggggaaaa gggcactatg 720  
 gtttaatttt tatatatattc tgctgctgct cgtcaggatt agatgtgctt gatctttctt 780  
 tcttcttttt gtgggtagaa tttgaatccc tcagcattgt tcatcggtag ttttctttt 840  
 gtcgatgctc accctgttgt ttggtgtttt tatactagtg gctatcctga cacggtctct 900  
 ttgtcaaata tctctgtgtg cagggtataac tgcaggaaac aaattgaaca tcattctatc 960  
 aatacaacac aaacacaaca caactcaatc atttatttga caacacaact aaacaaccat 1020  
 ggtctagagc tc 1032

# Sequence Listing Project.ST25

<210> 23  
<211> 10  
<212> DNA  
<213> artificial sequence

<220>  
<223> synthetic construct

<400> 23  
ccttttaggtt 10

<210> 24  
<211> 11  
<212> DNA  
<213> artificial sequence

<220>  
<223> synthetic construct

<220>  
<221> misc\_feature  
<222> (8)..(8)  
<223> N is any nucleotide, A, T, C, G

<400> 24  
ggttcgantic c 11

<210> 25  
<211> 194  
<212> DNA  
<213> rice

<400> 25  
accaccacca ccaccaccac ctctctcccc ctcgctgccg gacgacgagc tcctcccccc 60  
tccccctccg ccgccgccgg taaccacccc gcgtccctct cctctttctt tctccgtttt 120  
ttttttccgt ctcgtctcga tctttggcct tggtagtttg ggggagagag gcggcttcgt 180  
cgcccagatc ggtg 194

<210> 26  
<211> 194  
<212> DNA  
<213> maize

<400> 26  
ttccccaacc tcgtgttggt cggagcgcac acacacacaa ccagatctcc cccaaatcca 60  
cccgtcggca cctccgcttc aaggtacgcc gctcgtcctc ccccccccc cctctctacc 120  
ttctctagat cggcgttccg gtccatggtt agggcccggg agttctactt ctgttcatgt 180  
ttgtgttaga tccg 194

<210> 27  
<211> 194  
<212> DNA  
<213> maize

# Sequence Listing Project.ST25

<400> 27  
aaaccctccc tccctcctcc attggactgc ttgctccctg ttgaccattg gggatatgctt 60  
gctctcctgt tcatctccgt gctaaacctc tgcctctctg gtgggttttt gctgggattt 120  
tgagctaata tgctggccgc ggtagaaaag accgtgtccc ctgatgagct caagcgctcg 180  
ccttagccgc gtcc 194

<210> 28  
<211> 97  
<212> DNA  
<213> artificial sequence

<220>  
<223> synthetic construct

<400> 28  
ggaaacaaat tgaacatcat tctatcaata caacacaaac acaacacaaac tcaatcattt 60  
atttgacaac acaactaaac aaccatgggtc tagagct 97

<210> 29  
<211> 97  
<212> DNA  
<213> artificial sequence

<220>  
<223> synthetic construct

<400> 29  
ctagaccatg gttgttttagt tgtgttgtca aataaatgat tgagtttgtgt tgtgtttgtg 60  
ttgtattgat agaatgatgt tcaatttggt tcctgca 97

<210> 30  
<211> 693  
<212> DNA  
<213> artificial sequence

<220>  
<223> synthetic construct

<400> 30  
accaccacca ccaccaccac ctctccttc acacaacaca cacacaacag atctccccc 60  
tcctccctcc cgtcgcgccg cgcaacacct ggtaagatgg ctgtgcgctc agatatatat 120  
agtgatatgc actacaaaga tcataactag accgccgcct ccccccccc ccctctctac 180  
cttctctctt tctttctccg tttttttttt ccgtctcgtc tcgatctttg gccttggtag 240  
tttggggggc agaggcggtc tcgtcgccca gatcgggtgc cgttttttta tttggagggg 300  
cgggatctcg cggctgggtc tcggcgtgc gccggattct cgcggggaat ggggctctcg 360  
gatgtggatc tgatccgccg ttgttggggg agatatgggg cgtttaaaat ttcgccatgc 420  
taaacaagat caggaagagg ggaaaagggc actatggttt aatttttata tatttctgct 480

# Sequence Listing Project.ST25

|   |     |
|---|-----|
| gctgctcgtc aggattagat gtgcttgatc tttctttctt ctttttgtgg gtagaatttg | 540 |
| aatccctcag cattgttcat cggtagtttt tcttttgtcg atgctcaccc tgttgtttgg | 600 |
| tgtttttata ctagtggtta tcctgacacg gtctctttgt caaatatctc tgtgtgcagg | 660 |
| tataactgca ggaaacaaca acaataacca tgg                              | 693 |

<210> 31  
 <211> 810  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|  |     |
|--|-----|
| <400> 31   |     |
| ctatatatag gaagttcatt tcatttggag cccccaacc ctaccaccac caccaccacc   | 60  |
| acctctcct tcacacaaca cacacacaac agatctcccc catcctccct cccgtcgcgc   | 120 |
| cgcgcaacac ctggttaagat ggctgtgcgc tcagatatat atagtgatat gcactacaaa | 180 |
| gatcataact agaccgccgc ctcccccccc cccctctct accttctctc tttctttctc   | 240 |
| cgtttttttt ttccgtctcg tctcgatctt tggccttggg agtttggggg cgagaggcgg  | 300 |
| cttcgtcgcc cagatcggtg cgcgtttttt tatttggagg ggcgggatct cgcggctggg  | 360 |
| tctcggcgtg cggccggatt ctgcgggga atggggctct cggatgtgga tctgatccgc   | 420 |
| cgttggtggg ggagatatgg ggcgttttaa atttcgccat gctaaacaag atcaggaaga  | 480 |
| ggggaaaagg gcactatggt ttaattttta tatatttctg ctgctgctcg tcaggattag  | 540 |
| atgtgcttga tctttctttc ttctttttgt gggtagaatt tgaatccctc agcattgttc  | 600 |
| atcggtagtt tttcttttgt cgatgctcac cctgttgttt ggtgttttta tactagtggc  | 660 |
| tatcctgaca cggctctttt gtcaaatac tctgtgtgca ggtataactg caggaaacaa   | 720 |
| attgaacatc attctatcaa tacaacacaa acacaacaca actcaatcat ttatttgaca  | 780 |
| acacaactaa acaaccatgg tctagagctc                                   | 810 |

<210> 32  
 <211> 1078  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|   |     |
|---|-----|
| <400> 32  |     |
| atccatagca agcccagccc aacccaaccc aacccaaccc accccagtgc agccaactgg | 60  |
| caaatagtct ccacaccccc gcactatcac cgtgagttgt ccgcaccacc gcacgtctcg | 120 |
| cagccaaaaa aaaaaaaga aagaaaaaaa agaaaaagaa aaaacagcag gtgggtccgg  | 180 |
| gtcgtggggg ccggaaaagc gaggaggatc gcgagcagcg acgaggccgg cctccctcc  | 240 |

## Sequence Listing Project.ST25

|  |      |
|--|------|
| gcttccaaag aaacgcccc catcaattct atatatagga agttcatttc atttggagcc   | 300  |
| ccccaaccct accaccacca ccaccaccac ctctctcttc acacaacaca cacacaacag  | 360  |
| atctcccca tcttccctcc cgtcgcgccg cgcaacacct ggtaagatgg ctgtgcgctc   | 420  |
| agatatatat agtgatatgc actacaaaga tcataactag accgccgcct ccccccccc   | 480  |
| ccctctctac cttctctctt tctttctccg tttttttttt ccgtctcgtc tcgatctttg  | 540  |
| gccttggtag tttgggggcg agaggcggtc tcgtcgccca gatcggtgcg cgttttttta  | 600  |
| tttggaaggg cgggatctcg cggctgggtc tcggcgtgcg gccggattct cgcggggaat  | 660  |
| ggggctctcg gatgtggatc tgatccgccg ttgttggggg agatatgggg cgtttaaaat  | 720  |
| ttcgccatgc taaacaagat caggaagagg ggaaaagggc actatggttt aatttttata  | 780  |
| tattttctgct gctgctcgtc aggattagat gtgcttgatc tttctttctt ctttttggtg | 840  |
| gtagaatttg aatccctcag cattgttcat cggtagtttt tcttttgctg atgctcacc   | 900  |
| tggtgtttg tgtttttata ctagtggcta tcctgacacg gtctctttgt caaatatctc   | 960  |
| tgtgtgcagg tataactgca ggaaacaaat tgaacatcat tctatcaata caacacaaac  | 1020 |
| acaacacaac tcaatcattt atttgacaac acaactaaac aaccatggtc tagagctc    | 1078 |

&lt;210&gt; 33

&lt;211&gt; 1692

&lt;212&gt; DNA

&lt;213&gt; artificial sequence

&lt;220&gt;

&lt;223&gt; synthetic construct

&lt;400&gt; 33

|  |     |
|--|-----|
| ggtagccgagc attgcatgtc taagttataa aaaattacca catatTTTTT ttgtcacact | 60  |
| tgtttgaagt gcagtttatc tatctttata catatatTTT aactttactc tacgaataat  | 120 |
| ataatctata gtacaacaat aatatcagtg ttttagagaa tcatataaat gaacagttag  | 180 |
| acatggtcta aaggacaatt gagtatTTTg acaacaggac tctacagttt tatctTTTTa  | 240 |
| gtgtgcatgt gttctccttt ttttttgcaa atagcttcac ctatataata cttcatccat  | 300 |
| tttattagta catccattta gggtttaggg ttaatggttt ttatagacta atttttttag  | 360 |
| tacatctatt ttattctatt ttagcctcta aattaagaaa actaaaactc tatttttagtt | 420 |
| tttttatTTa ataatttaga tataaaatag aataaaataa agtgactaaa aattaaacaa  | 480 |
| ataccctTTa agaaattaaa aaaactaagg aaacattttt cttgtttcga gtagataatg  | 540 |
| ccagcctgtt aaacgccctc gactgacgct tcgaatgacg cacatgccat ccatagcaag  | 600 |
| cccagcccaa cccaacccaa cccaaccac cccagtgcag ccaactggca aatagtctcc   | 660 |
| acaccccggc actatcaccg tgagtgtcc gcaccaccgc acgtctcgca gccaaaaaaa   | 720 |
| aaaaaagaaa gaaaaaaaaa aaaaagaaaa aacagcaggt ggggccgggt cgtggggggc  | 780 |

# Sequence Listing Project.ST25

|  |      |
|--|------|
| ggaaaagcga ggaggatcgc tgacgcttcg aatgacgcac atgcccgcgc agcgacgagg  | 840  |
| ccggccctcc ctccgcttcc aaagaaacgc ccccatcaa ttctatatat aggaagttca   | 900  |
| tttcatttgg agccccccaa ccctaccacc accaccacca ccacctcctc cttcacacaa  | 960  |
| cacacacaca acagatctcc cccatcctcc ctcccgtcgc gccgcgcaac acctggtaag  | 1020 |
| atggctgtgc gctcagatat atatagtgat atgcactaca aagatcataa ctagaccgcc  | 1080 |
| gcctcccccc cccccctct ctaccttctc tctttctttc tccgtttttt ttttccgtct   | 1140 |
| cgtctcgatc tttggccttg gtagtttggg ggcgagaggc ggcttcgtcg cccagatcgg  | 1200 |
| tgcgcgtttt tttatttggg ggggcgggat ctgcgcgctg ggtctcggcg tgcggccgga  | 1260 |
| ttctcgcggg gaatggggct ctcggatgtg gatctgatcc gccgttggtg ggggagatat  | 1320 |
| ggggcgttta aaatttcgcc atgctaaaca agatcaggaa gaggggaaaa gggcactatg  | 1380 |
| gtttaatttt tatatatctt tgctgctgct cgtcaggatt agatgtgctt gatctttctt  | 1440 |
| tcttcttttt gtgggtagaa tttgaatccc tcagcattgt tcatcggtag tttttctttt  | 1500 |
| gtcgatgctc accctgttgt ttggtgtttt tatactagtg gctatcctga cacggtctct  | 1560 |
| ttgtcaaata tctctgtgtg cagggtataac tgcaggaaac aaattgaaca tcattctatc | 1620 |
| aatacaacac aaacacaaca caactcaatc atttatttga caacacaact aaacaaccat  | 1680 |
| ggtctagagc tc  | 1692 |

<210> 34  
 <211> 1032  
 <212> DNA  
 <213> artificial sequence

<220>  
 <223> synthetic construct

|   |     |
|---|-----|
| <400> 34  |     |
| ctcgagatac atattaagag tatggacaga catttcttta acaaactcca tttgtattac   | 60  |
| tccaaaagca ccagaagttt gtcattggctg agtcattgaaa tgtatagttc aatcttgcaa | 120 |
| agttgccttt cttttgtac tgtgttttaa cactacaagc catatattgt ctgtacgtgc    | 180 |
| aacaaactat atcaccatgt atcccaagat gcttttttaa ttctatatat aggaagttca   | 240 |
| tttcatttgg agccccccaa ccctaccacc accaccacca ccacctcctc cttcacacaa   | 300 |
| cacacacaca acagatctcc cccatcctcc ctcccgtcgc gccgcgcaac acctggtaag   | 360 |
| atggctgtgc gctcagatat atatagtgat atgcactaca aagatcataa ctagaccgcc   | 420 |
| gcctcccccc cccccctct ctaccttctc tctttctttc tccgtttttt ttttccgtct    | 480 |
| cgtctcgatc tttggccttg gtagtttggg ggcgagaggc ggcttcgtcg cccagatcgg   | 540 |
| tgcgcgtttt tttatttggg ggggcgggat ctgcgcgctg ggtctcggcg tgcggccgga   | 600 |
| ttctcgcggg gaatggggct ctcggatgtg gatctgatcc gccgttggtg ggggagatat   | 660 |

# Sequence Listing Project.ST25

|  |      |
|--|------|
| ggggcgttta aaatttcgcc atgctaaaca agatcaggaa gaggggaaaa gggcactatg  | 720  |
| gtttaatttt tatatatattc tgctgctgct cgtcaggatt agatgtgctt gatctttctt | 780  |
| tcttcttttt gtgggtagaa tttgaatccc tcagcattgt tcatcggtag ttttctttt   | 840  |
| gtcgatgctc accctgttgt ttggtgtttt tatactagtg gctatcctga cacggtctct  | 900  |
| ttgtcaaata tctctgtgtg caggtataac tgcaggaaac aaattgaaca tcattctatc  | 960  |
| aatacaacac aaacacaaca caactcaatc atttatttga caacacaact aaacaaccat  | 1020 |
| ggtctagagc tc  | 1032 |